Abstract

Recent advancements in technology have enabled the development of low-cost, low-power sensor devices used in wireless communication. A WSN consist of large number of wireless devices, the sensor nodes, able to take environmental measurements and route these measurements to the base station. These sensor nodes are very small in size and are powered by battery. In a WSN, the sensor nodes are deployed randomly in the area of interest. Being battery powered, these sensor nodes lose their energy every time they collect or transmit any information and become inactive. The WSN becomes unstable as the first sensor node dies. Thus the routing protocol should be energy efficient should help in increasing the stability period.
and so the network lifetime of the WSN. In this paper, the genetic algorithm is used as an optimizing tool for the improvement of lifetime & stability period of the network. For the purpose of optimization the GA is applied on SEP. The proposed protocol, when compared with SEP and LEACH shows better outcomes.

References


Index Terms

Computer Science

Distributed Systems
Keywords
Clustering  Ga  Sep  Stability Period  Network Lifetime  Wsn.